ABSTRACT OF THE DISCLOSURE

A client signal having a constant bit rate is segmented every a bytes to create code information blocks. The bit rate of the client signal is increased such that the client signal has the code information block and an empty area comprised of b bytes, and the ratio c/a is equal to or higher than 110 % to create a code block 3 comprised of c bytes. The code information block in the code block is encoded such that an error correcting code is included therein to have an encoding gain of 6 dB or higher for a bit error ratio of 10^{-12}. Associated check bits are placed in the empty area to eventually generate a super FEC signal.